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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,417	02/15/2002	Jukka Suonvieri	4925-199PUS	2136

7590 08/26/2004

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EXAMINER

FERGUSON, KEITH

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 08/26/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/031,417

Applicant(s)

SUONVIERI ET AL.

Examiner

Keith T. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Finland on 07/23/1999. It is noted, however, that applicant has not filed a certified copy of the 991643 application as required by 35 U.S.C. 119(b).

***Claim Objections***

2. Claims 1-17 are objected to because of the following informalities: Claim 1, line 4, the phrase "redetermination" should recite "redetermining". Appropriate correction is required. Regarding claim 12, line 5, the phrase "redetermination" should recite "redetermining". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. Claim 8-11 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 recites the limitation "the crosstalk" in line 23. There is insufficient antecedent basis for this limitation in the claim. Claim 8 recites the limitation "the C/I" in line 1. There is insufficient

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antecedent basis for this limitation in the claim. Claim 17 recites the limitation "the C/I" in line 2. There is insufficient antecedent basis for this limitation in the claim

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1,2,4-14,16 and 17 are rejected under 35

U.S.C. 102(e) as being anticipated by Larribeau et al..

The claimed invention reads on Larribeau et al. as follows:

Regarding claim 1, Larribeau et al. discloses method (fig. 6A) for redetermining the operating frequencies of base stations of an internal network (building) (col. 3 lines 15-46, col. 4 lines 17-28 and col. 5 lines 30-40), which is a first cellular radio network (microsystem) or a part of a first cellular radio network (microsystem) (col. 3 lines 15-46, col. 4 lines 17-28), when the operating conditions of the internal network have changed (col. 6 lines 25-48, col. 11 lines 33-58, col. 12 lines 34-60 and col. 19 lines 37-58), characterized in that the redetermination of the operating frequencies is performed on the basis of a frequency measurement performed for an earlier determination (i.e. within a backup list) and information about a frequency plan of an external network (macrosystem) (col. 11 lines 33-58, col. 12 lines 34-60, col. 16 lines 15-18 and col. 19 lines 37-58), which is a second cellular radio network

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(macrosystem) or a part of a second cellular radio network detected in the area of the internal network (microsystem) (col. 11 lines 33-58, col. 12 lines 34-60 and col. 19 lines 37-58), by examining if a frequency, which interferes with the base station of the internal network, has been taken into use in the external network (col. 6 lines 25-48, col. 11 lines 33-58, col. 12 lines 34-60 and col. 19 lines 37-58).

Regarding claims 12-14, 16 and 17, Larribeau et al. discloses an arrangement for redetermining the operating frequencies of base stations of an internal network (building) (col. 3 lines 15-46, col. 4 lines 17-28 and col. 5 lines 30-40), which is a first cellular radio network (microsystem) or a part of a first cellular radio network (microsystem) (col. 3 lines 15-46, col. 4 lines 17-28), when the operating frequencies have been earlier determined by frequency measurement (i.e. within a backup list and residual list) (first and second database) but the operating conditions of the internal network have changed (col. 11 lines 33-58, col. 12 lines 34-60, col. 16 lines 15-18 and col. 19 lines 37-58), characterized in that it includes AFP controller (data processing means) for the redetermination of the operating frequencies on the basis of a frequency measurement performed for an earlier determination and information of an external network (macrosystem) (col. 12 lines 33-60 and col. 19 lines 37-58), which is a second cellular radio network (macrosystem) or a part of a second cellular radio network (macrosystem) detected in the area of the internal network, has been taken into use in the external network (col. 12 lines 33-60 and col. 19 lines 37-58), said data processing means including a database (backup list and residual list) for saving the operating frequencies in use at base stations of the external network (col. 11 lines 45-61, col. 12 lines 33-60, col. 13 lines 1-41 and col. 19 lines 37-58).

Regarding claim 2, Larribeau et al. discloses saving the results of an earlier measurement (backup list) (col. 11 lines 25-58), and if an interfering frequency is detected (col. 11 lines 25-58 and col. 12 lines 34-53), changing an interference-free frequency to the base station of the internal network on the basis of an earlier measurement (col. 11 lines 25-58 and col. 12 lines 34-53) and the information about the frequency plan of the external network (col. 11 lines 25-58, col. 12 lines 34-53 and col. 19 lines 37-58).

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Regarding claims 4 and 5, Larribeau et al. discloses when it is noticed that a base station recognized on the basis of an earlier measurement receives in the new frequency plan a frequency already being used in a base station of the internal network (col. 4 lines 17-28, col. 6 lines 25-48, col. 11 lines 25-58, col. 12 lines 34-53 and col. 19 lines 37-58), the frequency of the internal network is changed to an interference-free frequency (col. 4 lines 17-28, col. 6 lines 25-48, col. 11 lines 25-58, col. 12 lines 34-53 and col. 19 lines 37-58).

Regarding claim 6, Larribeau et al. discloses when it is detected from the frequency plan that a frequency that was used by the external network (col. 4 lines 17-28, col. 6 lines 25-48, col. 11 lines 25-58, col. 12 lines 34-53 and col. 19 lines 37-58) and found to be affected by interference in an earlier measurement has become interference-free because it is not used any more (col. 4 lines 17-28, col. 6 lines 25-48, col. 11 lines 25-58, col. 12 lines 34-53 and col. 19 lines 37-58), this frequency is taken into use by the internal network (col. 4 lines 17-28, col. 6 lines 25-48, col. 11 lines 25-58, col. 12 lines 34-53 and col. 19 lines 37-58).

Regarding claim 7-11, Larribeau et al. discloses checking the suitability of the frequency to be taken into use measuring the signal strength (RSSI) (Rx Level) received in the area of the internal network in the measurement route when the base station of the internal network transmits a signal on the broadcast control channel (BCCH) (inherent, as taught in col. 11 lines 42-61, col. 12 lines 25-60), examining if a certain predetermined proportion of the measurement samples of the signal strength is higher than a minimum value set in advance (col. 11 lines 42-61, col. 12 lines 25-60).

#### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the

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differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 3 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larribeau et al. in view of Wallentin.

Regarding claims 3 and 15, Larribeau et al. discloses method as discussed supra in claims 1,13 and 14 above. Larribeau et al. differs from claims 3 and 15 of the present invention in that it does not explicit disclose the identification information of the base station of the external network, which produces the interfering transmission are saved for the base stations of the internal network. Wallentin teaches the identification information of a cell which produces an interfering transmission are saved (paragraph 0056). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Larribeau et al. with the identification information of the base station of the external network which produces the interfering transmission are saved for the base stations of the internal network in order for the microsystem to reevaluate the backup list of channels of the Macrosystem to select and interference free channel to use within the microsystem, as taught by Wallentin.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (703) 305-4888. The examiner can normally be reached on 6:30am-5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone number for the

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organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith Ferguson  
Art Unit 2683  
August 19, 2004

A handwritten signature in black ink, appearing to read 'Keith F', with a long horizontal stroke extending to the right.